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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,895	01/17/2002	Michael Hesse	52137	2610
26474	7590	01/14/2004	EXAMINER	
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/046,895

Applicant(s)

HESSE ET AL.

Examiner

Patricia L. Hailey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☐ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Applicants' remarks and amendments, filed on October 29, 2003, have been carefully considered.

In the amendments, claims 8 and 9 have been canceled, and new claim 10 has been added.

Claims 1-7 and 10 are now pending in this application.

Also, in the amendment to claim 1, at line 5, the word "of" (as in "support material of a precursor thereof") should be "or", as shown in claim 1 as originally filed.

#### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Documents were filed on March 26, 2002.

#### *Withdrawn Rejections*

The 112(2) rejections of claims 1-9 stated in the previous Office Action have been withdrawn in view of Applicants' amendments to claim 1 and of the cancellation of claims 8 and 9.

The 102(b) rejection of claims 1-3 and 7-9 as being anticipated by Gembicki et al. (U. S. Patent No. 4,036,784) has been withdrawn in view of Applicants' persuasive arguments regarding this rejection. While this reference teaches the coextrusion of catalyst components with the inorganic oxide (col. 4, lines 31-62, especially lines 37-41), Gembicki et al. also teach the subsequent impregnation of the extruded product with metal components to produce the catalyst. Thus, the metal components in the catalyst composition are present in both the core and the impregnated layer.

#### *New Ground(s) of Rejection*

The following New Ground(s) of Rejection are being made in view of the Examiner's reconsideration of the instant claims.

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*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tenten et al. (U. S. Patent No. 6,169,214).
- Tenten et al. teach a coated catalyst consisting of a hollow cylindrical carrier and a catalytically active oxide material applied to the outer surface of the carrier. See col. 6, lines 2-8 of Tenten et al.
- Examples of the carrier include alumina, silica, silicon carbide, zirconium dioxide, etc. See col. 7, lines 8-15 of Tenten et al.
- Examples of the catalytically active oxide material are those that are already in oxide form, or are in the form of compounds that can be converted into oxides by heating. See col. 10, lines 1-62 of Tenten et al., which also teaches metals or metal compounds that read upon the limitation "5<sup>th</sup> to 8<sup>th</sup> transition group of the Periodic Table, groups IB or IIB,..." as recited in claim 2.
- The catalysts are useful in various gas-phase oxidation processes, e.g., the preparation of acrylic acid from acrolein. See col. 11, line 40 to col. 12, line 26 of Tenten et al.
- The limitations of claim 7 are considered inherently taught by Tenten et al. in view of the reference's teachings of the claimed catalyst components and the coextrusion thereof.
- In view of these teachings, Tenten et al. anticipate claims 1-3 and 7.

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In the alternative:

Because claims 1-3 and 7 are in product-by-process form, the teachings of Tenten et al. are considered to read upon the claim limitations regarding the core/jacket catalyst. Thus, it is considered that "[A]ny difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show that the same is a process of making." In re Brown, 173 U.S.P.Q. 685 and In re Fessmann, 180 U.S.P.Q. 324.

Further, product-by-process claims do not patentably distinguish the product of reference even though made by a different process. In re Thorpe, 227 U.S.P.Q. 964.

7. Claims 1, 2, 4, and 7 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Thompson et al. (U. S. Patent No. 6,297,185).

Thompson et al. teach a catalyst comprising an electrically conductive ceramic substrate having at least one noble metal supported thereupon. See col. 2, lines 63-65 of Thompson et al.

Examples of the electrically conductive ceramic substrate include carbides and nitrides of transition metals (considered to read upon the phrase "inorganic nitrides or carbides"). See col. 3, lines 6-19 of Thompson et al., as well as Example 1, which employs a catalyst comprising platinum supported on tungsten carbide.

Examples of the noble metals include platinum and alloys thereof. See col. 4, lines 1-11 of Thompson et al.

In view of these teachings, Thompson et al. anticipate claims 1, 2, 4, and 7.

In the alternative:

Because claims 1, 2, 4, and 7 are in product-by-process form, the teachings of Tenten et al. are considered to read upon the claim limitations regarding the core/jacket catalyst. Thus, it is considered

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that "[A]ny difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show that the same is a process of making." In re Brown, 173 U.S.P.Q. 685 and In re Fessmann, 180 U.S.P.Q. 324.

Further, product-by-process claims do not patentably distinguish the product of reference even though made by a different process. In re Thorpe, 227 U.S.P.Q. 964.

*Allowable Subject Matter*

8. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 10 is allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

The cited references do not teach or suggest the limitations of claims 5 and 6, namely the compositions comprising the support material or precursor thereof and the composition comprising the catalytically active material or precursor thereof.

Additionally, the prior art of record does not teach or suggest the claimed process of producing a core/jacket catalyst molding with a core made from an inorganic support material and with a jacket made from a catalytically active material, wherein the process comprises: a) co-extruding an aqueous molding composition comprising the support material (or a precursor thereof) with an aqueous molding composition comprising the catalytically active material (or a precursor thereof), wherein an arrangement of two extruders is selected so that during the extrusion process a jacketing phase made from the catalytically active material concentrically surrounds a compact core made from the support material, b) drying the co-extrudate, and c) calcining the dried co-extrudate.

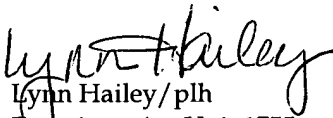
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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1200.

  
Lynn Hailey/plh  
Examiner, Art Unit 1755  
January 7, 2004

  
HELENE KLEMANSKI  
PRIMARY EXAMINER  
GROUP 1900